

2. *Ryania Candollei*, Vahl, *Patrisia bicolor*, DeC. Prod. i. p. 255.
3. *R. Patrisii*, Vahl, *Patrisia parviflora*, DeC. l. c.
4. *R. dentata*, Vahl, *Patrisia dentata*, H. B. K.
5. *R. Kunthii*, Vahl, *Patrisia affinis*, H. B. K.

Roterodami, m. Novemb. 1842.

V.—*Descriptions of new Shells from the Collection of Captain Belcher, R.N., C.B., &c.* By RICHARD BRINSLEY HINDS, Esq., Surgeon R.N.

THE genus *Triphoris** was established by M. Deshayes in 1824 to receive a small fossil reversed shell, having a near affinity to *Cerithium*, and which was characterized as the type of a group, as an elongated shell, turrited, inflated about the middle, sinistral, terminated by three rounded openings, the anterior being the largest, another at the base tubular, and a third posterior. Some recent shells were, however, soon conveniently placed in the same group, as the *Cerithium perversum* of Lamarck, and the old *Murex adversus* of our own coasts. The number of recent species amounts to five in Kiener's résumé of *Cerithium*, where they constitute his fourth group. I have found the species so numerous in the collection of Capt. Belcher, C.B., that they give a very formidable appearance to the genus, which seems likely to become extensive. This accession also makes it necessary to alter the character of the genus to some extent. Though all the species have diminutive shells, and generally require the assistance of a glass for their examination, yet they will be found to possess very distinct characters, and are at the same time eminently beautiful in their form and sculpture. If we except some fluctuation in colour, which may probably be attributable to locality, they seem liable to little variation. The only circumstance necessary to guard against in the discrimination of species, according to my own experience, is the circumstance, that in the transverse series of granulations which prevail in many, the number will be found to fluctuate with age. Thus, in the Mediterranean shell, *Triphoris perversus*, the young will be found to possess only two series of granules; when more advanced in age, a third, intermediate in position, and smaller, is added; and in the full-grown shell the last whorl has four distinct series. Whilst the shells from Captain Belcher's collection were under examination, Mr. J. E. Gray and Mr. W. Metcalfe did me the favour to place their specimens at my disposal, which has enabled me to add several more species.

* *Triphorus* of Swainson's Treatise, and *Triphora* of Sowerby's Manual.

TRIPHORIS, *Deshayes*.

Testa parva, gracilis, plerumque elongata, sinistra; carinæ et tubercula transversim disposita, canalis tubularis obliquus; sinus lateralis plus minusve coarctatus vel tubiformis.

Geog. As far as our present knowledge acquaints us, the genus would appear most numerous in the Indian seas, particularly in the Straits of Malacca. Though much attention was bestowed on small shells along the western coast of America, yet not a single species was met with. In crossing the Pacific to the westward, a solitary species was first seen at Bow Island; apparently *Triphoris adversus*. At New Ireland a few more were noticed, though not *T. violaceus* (*Cerithium violaceum*, Quoy). On the shores of New Guinea they were still more frequent; and those from the Straits of Malacca are particularly interesting shells. They occur in the United States, and a local species is described, *T. nigrocinctus* (*Cerithium nigrocinctum*, Adams). A few from our own shores and the Mediterranean are well known, and in the West Indies they would seem to be frequent. The genus is both littoral, and found in deep water.

1. Subgenus *INO*.

Testa cylindræa, elongata, acuminata.

1. *T. gigas*. Testa valde elongata; anfractibus 25—28 planulatis, quadriseriatim granulosis, inferiore paululum maxima ad basin granulorum punctatis. Axis 11 lin.

Geog. New Guinea; dredged from a muddy bottom at 18 fathoms.

This is the largest species with which I am acquainted. The colour would appear to be brown, but, as the specimens are dead, this cannot be relied on.

2. *T. concors*. Testa cylindræa; anfractibus viginti-duo triseriatim granulosis; serie media paululum minima; sutura lineata; apertura rotundata; sinu laterali tubiformi. Axis 6 lin.

Geog. Straits of Malacca; in 18 fathoms.

3. *T. sculptus*. Testa pallide rufente; anfractibus 15—18 biseriatim granoso-carinatis, medio lævigatis carina secundaria; prope suturam carinula monilifera; sinu laterali patulo. Axis $4\frac{1}{2}$ lin.

Geog. Straits of Malacca; in 23 fathoms.

4. *T. vittatus*. Testa lævigata, cornea; anfractibus 22—25 transversim leviter sulcatis, medio fusco elegantissime vittatis; apertura subquadrata; sinu laterali obsoleto. Axis 8 lin.

Geog. Straits of Malacca; in 23 fathoms.

5. *T. bilix*. Testa attenuata pallida; anfractibus quindecim tricarinatis; carina inferiore paululum maxima marmorata, media minima; apertura rotundata; sinu laterali patulo. Axis 3 lin.

Geog. Straits of Malacca; dredged from a muddy bottom in 20 fathoms.

6. *T. Metcalfeii*. Testa alba fusco marmorata; anfractibus numerosis tricarinatis; carina inferiore maxima fusco maculata, duobus superioribus parvis, media minima; sutura carinata. Axis 7 lin.

Geog. Pacific Ocean? Cab. Metcalfe.

A fine species with squarish brown spots on a white surface; but I regret that the single specimen in Mr. Metcalfe's collection has neither the apex or mouth entire.

7. *T. cancellatus*. Testa pallide rufente; anfractibus 15—18 bicarinatis; carinis albo maculatis; inter carinas cancellata lineis albis longitudinalibus intervallis fuscis; sutura sulcata; apertura subquadrata; sinu laterali margine contracta. Axis $4\frac{1}{2}$ lin.
Geog. Straits of Malacca; in 20 fathoms.

8. *T. corrugatus*. Testa cornea; anfractibus 17—20 bicarinatis, inter carinas corrugatis, medio carina secundaria; sutura leviter carinata; apertura rotunda; sinu laterali lineari. Axis $6\frac{1}{2}$ lin.

Geog. New Guinea; dredged from 23 fathoms, among fine gravel. Straits of Malacca; from 18 to 23 fathoms.

9. *T. maxillaris*. Testa rosea; anfractibus 16—18, superficie lævigata, bisulcatis; marginibus sulcorum granulatis; sutura sulcata, marginibus granulatis, apertura subquadrata, sinu laterali parvo patulo. Axis $5\frac{1}{2}$ lin.

Geog. Straits of Malacca; dredged from 18 to 23 fathoms.

This shell is very remarkably characterized. The surface is perfectly smooth, and of an agreeable rose-colour; but each whorl is divided into three unequal parts by two furrows. The margins of each furrow, and also of the depressed line which marks the course of the suture, are provided with a series of horizontal granulations, which look towards each other and do not appear above the surface of the shell, but under a magnifying glass display an appearance which seems to justify the specific name.

10. *T. micans*. Testa gracili attenuata, fusca; anfractibus 20—22, supra coarctatis, triseriatim granulosis, serie inferiore maxima alba, superiore minima; apertura subquadrata; sinu laterali lineari. Axis 6 lin.

Geog. New Guinea; dredged from mud in from 5 to 18 fathoms.

11. *T. asperrimus*. Testa gracili attenuata; anfractibus 24—26, superne valde coarctatis, inferne angulatis, serie duplici granulorum; prope suturam granuloso-carinata. Axis 6 lin.

Geog. New Guinea; dredged from a muddy bottom in 8 fathoms.

The only specimen of this species in the collection has an injured mouth. It is remarkable for its long needle-like shape; and the upper portion of each whorl being strangulated, and the lower angular and with a series of tubercles, the shell has a very rough and jagged appearance.

12. *T. marmoratus*. Testa cylindræa fusca, albo marmorata; anfractibus 16—18 triseriatim granulosis; seriebus æqualibus, confertis, inferiore plerumque alba; sutura obsoleta. Axis 3 lin.

Geog. West Indies. Cab. Gray.

13. *T. elegans*. Testa alba, fusco marmorata; anfractibus 16—18

quater carinatis; carinis duobus primariis, inferiore maximo; duobus secundariis alternantibus; carinis omnibus maculis albis et fuscis ornatis. Apertura rotundata, sinu laterali patulo. Axis $4\frac{1}{2}$ lin.

Geog. Straits of Malacca; from 20 fathoms, mud.

2. Subgenus SYCHAR.

Testa elongata, anfractus rotundati, apex mamillaris.

14. *T. vitreus*. Testa pellucida; anfractibus quindecim lævigatis rotundatis, lineis duabus elevatis cinctis; apice mamillari; apertura subquadrata; sinu laterali patulo. Axis $4\frac{1}{2}$ lin.

Geog. Straits of Malacca; dredged from 20 fathoms.

One of the elevated lines traverses the whorl about its centre; the other, not at first very apparent, will be found on its lower surface near the suture.

3. Subgenus MASTONIA.

Testa acuminata, circa mediam tumida.

15. *T. vulpinus*. Testa nigricante; anfractibus quatuordecim tricarinatis; carina inferiore albida; apertura rotundata; sinu laterali subnullo. Axis 3 lin.

Geog. New Ireland; found, with other small shells, among fine gravel about low-water mark.

16. *T. monilifer*. Testa parva, elegantissime monili; anfractibus decem biseriatis granulosis; granulis seriei inferioris albis intervallis rubris, supremæ albis; apertura subquadrata, sinu laterali angusto. Axis $2\frac{1}{3}$ lin.

Geog. Straits of Malacca; in 18 to 23 fathoms, mud.

The manner in which the lower series of markings is repeated in the last whorl is very evident in this species, though to be met with in nearly the whole. Thus the series of beading, which is single on the upper whorls, will here be found to be double on the last.

17. *T. Grayii*. Testa ovali; anfractibus decem, superioribus biseriatis granulosis moniliferis, duabus inferioribus triseriatis, serie media minima. Axis $4\frac{1}{2}$ lin.

Geog. The Mediterranean Sea. Cab. Gray.

The single specimen of this very pretty shell has the mouth much injured.

18. *T. ruber*. Testa rufa; anfractibus undecim biseriatis granulosis, seriebus subdistantibus suturam obtegentibus; apertura rotundata; sinu laterali margine contracto. Axis 4 lin.

Geog. New Ireland; numerous among fine gravel at low water. Straits of Malacca; in 20 fathoms.

Its reddish colour and double series of tubercles will readily distinguish this shell. In some of the specimens a small in-

intermediate series is about to make its appearance on the one or two inferior whorls.

✓ 19. *T. affinis*. Testa fusca albo marmorata, præcipue serie granulorum inferiore; anfractibus tridecim triseriatim granulosis; seriebus æqualibus suturam offerentibus; apertura subquadrata. Axis $3\frac{1}{2}$ lin.

Geog. St. Vincent's, West Indies, Rev. W. J. Guilding. Cab. Gray et Metcalfe.

Nearly allied to *T. marmoratus*.

✓ 20. *T. castus*. Testa parva; anfractibus duodecim, biseriatis elegantè granosis; serie inferiore parva fusca, superiore maxima margaritacea; apertura rotunda; sinu laterali postico tubiformi. Axis 2 lin.

Geog. St. Vincent's, West Indies; Rev. W. J. Guilding. Cab. Gray et Metcalfe.

21. *T. cælebs*. Testa ovali; anfractibus undecim triseriatim granulosis; serie media fusca, alteris albidis; sutura sulcata; apertura subquadrata; sinu laterali subnullo. Axis 4 lin.

Geog. Pacific Ocean? Cab. Metcalfe.

22. *T. æmulans*. Testa albida; anfractibus duodecim biseriatis granulosis, medio carina minima granosa fusca; sutura carinulata; apertura subquadrata; sinu laterali patulo. Axis 5 lin.

Geog. Pacific Ocean? Cab. Metcalfe.

23. *T. concinnus*. Testa ovali elongata; anfractibus novem triseriatim granulosis; serie media minima, inferiore fusca, superiore cornea. Axis $3\frac{1}{2}$ lin.

Geog. Pacific Ocean? Cab. Metcalfe.

The manner in which the series of markings of the spire are repeated in the last whorl is well seen in this species, where the handsome dark spiral line resulting from the lower series is again twice repeated; so that the last whorl has really five series of granules.

24. *T. tristis*. Testa ovali elongata, ferruginea; anfractibus tridecim biseriatis granulosis; serie superiori paululum maxima et albida; anfractu penultimo serie tertia minima. Axis 3 lin.

Geog. —? Cab. Gray.

25. *T. clemens*. Testa cornea nitenti; anfractibus quindecim triseriatim granulosis; serie media parva ad inferiorem appropinquante, inferiore prominulo-margaritacea; anfractus ultimi granulis parvis; sutura sulcata; apertura rotunda; sinu laterali patulo. Axis 3 lin.

Geog. Straits of Malacca; from 20 fathoms, mud.

26. *T. Carteretensis*. Testa pallida; anfractibus quatuordecim triseriatim granulosis, serie media minima, infra duas superiores sulcatis; apertura subquadrata; sinu laterali patulo. Axis 3 lin.

Geog. Port Carteret, New Ireland; among fine gravel at low water.

The sulcus, which traverses the whorl transversely, will readily distinguish this species.

27. *T. roseus*. Testa ovali; anfractibus decem biserialim granulosis, seriebus corneis, medio lævigato roseo serie tertia parva; apertura rotundata. Axis $3\frac{1}{2}$ lin.

Geog. Pacific Ocean? Cab. Metcalfe.

28. *T. candidus*. Testa elongata, pallide cærulente; anfractibus sexdecim tricarinated lævigatis, medio subfuscis; carina media minima; apertura rotundata; sinu laterali patulo. Axis 4 lin.

Geog. Pacific Ocean? Cab. Metcalfe.

29. *T. hilaris*. Testa elongata; anfractibus quatuordecim tricarinated; carinis duabus inferioribus æqualibus albidis, superiore marmorata paululum maxima. Axis 4 lin.

Geog. Pacific Ocean? Cab. Metcalfe.

November 28, 1842.

VI.—*Hints towards a new specific character in the Willows.*

By W. A. LEIGHTON, B.A., F.B.S.E., &c.

CURSORILY looking at the willows which fringe the margins of the river Severn near Shrewsbury, the thought suddenly occurred to me, that possibly a character might exist in the form of the leaf-bud, which might prove serviceable in distinguishing those species of this extensive and difficult genus that were closely allied to each other. On examining the leaf-buds of trees respectively named by Mr. Borrer *Russelliana* and *fragilis*, and described on his authority under those names in my 'Flora of Shropshire,' I found my conjecture strikingly realized. In *Russelliana* the leaf-bud was in form ovato-lanceolate, with a somewhat acute apex, very much dorsally compressed, the back alone being prominent from the enclosed contents. These did not by any means fill the entire cavity of the outer integument, but occupied the central portion only, and consequently the margins and apex of the leaf-bud were rendered thin and compressed, though nevertheless not decidedly acute. On the contrary, in *fragilis* the cavity of the outer integument was completely filled, and the leaf-bud assumed in consequence a decided full and plump appearance. It was of an elongated ovate shape, obtuse or rounded at the apex, nearly triangular, with the angles rounded. The accompanying figures will more clearly illustrate my meaning.

Whether this character prevail in the allied species of other groups I have had no means of deciding, but would be permitted to throw out the above hints, as the character appears to me important, and well worthy the attention of those bota-